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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/606,899

06/27/2003

Yutaka Tokura

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12/02/2008

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EXAMINER

MILIA, MARK R

ART UNIT

PAPER NUMBER

2625

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/606,899	Applicant(s) TOKURA ET AL.	
	Examiner Mark R. Milia	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 9/3/08 and has been entered and made of record. Currently, claims 1-2 and 6-7 are pending.

Response to Arguments

2. Applicant's arguments filed 9/3/08 have been fully considered but they are not persuasive.

Applicant asserts that Katakura (US 6,108,017) fails to disclose that when a black-and-white image signal is transferred from the image generation controller unit to the image processing controller unit, the image signals of black color component are simultaneously transferred by using the yellow, magenta, cyan and black signal lines.

The examiner respectfully disagrees as Katakura does disclose such a feature.

Particularly, Katakura states that black image data is processed not only by the circuits for black but also by the circuits for yellow, magenta, and cyan images (column 17 lines 20-24). Katakura also states that the signal selector **261** divides the data for the black-and-white image, stored in the buffer, into four items of data and distributes the four items to the four compressing circuits and then to four expanding circuits and then from

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the video buffer the four items are transferred to the printing mechanism to thereby increase printing speed by a factor of four (column 19 lines 29-45).

Applicant also asserts that Katakura fails to disclose that the black-and-white image signal is a binary signal and has a higher resolution than the color image signal. The examiner respectfully disagrees as Katakura discloses that the black-and-white image signal is a binary signal as Katakura states that the black-and-white image data may be distributed byte by byte (column 19 lines 35-36) evidencing that the image signal is binary in nature. The examiner agrees that Katakura does not explicitly state that the black-and-white image signal has a higher resolution than the color image signal but it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the resolution of a black-and-white image to a resolution higher than a color image for purposes of printing a black-and-white photograph or similar item that necessitated a high resolution. It is entirely plausible to have a color image with a resolution of 300 dpi and to have a black-and-white image with a resolution of 600 dpi depending on what the image data is representing, such as a photograph, graphics, text, images, etc. Thus a desired color image may contain an image, such as a pie chart in a business plan, and a black-and-white image may be a photograph, which needs to be printed in a higher resolution.

Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katakura et al. (US 6,108,017).

Regarding claims 1 and 6, Katakura discloses a data transfer method and system in an image formation system which is equipped with an image generation controller unit for generating bitmap image data of an image (see Fig. 23 and column 18 line 61-column 19 line 6), an image formation unit for forming an image on a recording medium (see Figs. 1 and 23), an image processing controller unit for controlling the image formation unit and also transferring image data at a timing requested by the image formation unit (see Fig. 27, column 19 lines 7-25, and column 20 lines 24-31), and respective data signal lines for yellow, magenta, cyan and black to be used to transfer the image data between the image generation controller unit and the image processing controller unit (see Fig. 27), wherein in a case where the number of image bearing bodies of the image formation unit is one, when a color image signal is transferred from the image generation controller unit to the image processing controller unit, the image signals of one color component for the four lines are simultaneously transferred by using the yellow, magenta, cyan and black signal lines repeatedly until

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the transfer of the image signals for one page ends, and then the image signals of the next color component are transferred (see column 13 lines 12-14, column 14 lines 46-64, column 17 lines 20-24, column 17 line 66-column 18 line 10, column 19 lines 26-39, and column 20 lines 5-15), and when a black-and-white image signal is transferred from the image generation controller unit to the image processing controller unit, the image signals of black color component are simultaneously transferred by using the yellow, magenta, cyan and black signal lines, wherein the black-and-white image signal is a binary signal (see column 17 lines 20-24, column 17 line 66-column 18 line 10, column 19 lines 26-39, and column 20 lines 5-15, Katakura states that the black-and-white image data may be distributed byte by byte, evidencing that the image signal is binary in nature).

Katakura does not disclose expressly the black-and-white image signal has a higher resolution than the color image signal.

Regarding claims 2 and 7, Katakura discloses a data transfer method and system in an image formation system which is equipped with an image generation controller unit for generating bitmap image data of an image (see Fig. 23 and column 18 line 61-column 19 line 6), an image formation unit for forming an image on a recording medium (see Figs. 1 and 23), an image processing controller unit for controlling the image formation unit and also transferring image data at a timing requested by the image formation unit (see Fig. 27, column 19 lines 7-25, and column 20 lines 24-31), and respective data signal lines for yellow, magenta, cyan and black to be used to transfer the image data between the image generation controller unit and the image

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processing controller unit (see Fig. 27), wherein in a case where the number of image bearing bodies of the image formation unit is four, when a color image signal is transferred from the image generation controller unit to the image processing controller unit, the image signals of one color component for the four lines are simultaneously transferred by using the yellow, magenta, cyan and black signal lines repeatedly until the transfer of the image signals for one page ends, and then the image signals of the next color component are transferred (see column 13 lines 12-14, column 14 lines 46-64, column 17 lines 20-24, column 17 line 66-column 18 line 10, column 19 lines 26-39, and column 20 lines 5-15), and when a black-and-white image signal is transferred from the image generation controller unit to the image processing controller unit, the image signals of black color component are simultaneously transferred by using the yellow, magenta, cyan and black signal lines, wherein the black-and-white image signal is a binary signal (see column 17 lines 20-24, column 17 line 66-column 18 line 10, column 19 lines 26-39, and column 20 lines 5-15, Katakura states that the black-and-white image data may be distributed byte by byte, evidencing that the image signal is binary in nature).

Katakura does not disclose expressly the black-and-white image signal has a higher resolution than the color image signal.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the resolution of a black-and-white image to a resolution higher than a color image for purposes of printing a black-and-white photograph or similar item that necessitated a high resolution. It is well known in the art

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to change the resolution of an image, regardless of whether it is color or black-and-white. Katakura even discloses an embodiment in which black-and-white data with a resolution of 600 dpi is reduced through compression to 300 dpi because it contains only character data. It is entirely plausible to have a color image with a resolution of 300 dpi and to have a black-and-white image with a resolution of 600 dpi depending on what the image data is representing, such as a photograph, graphics, text, images, etc. Thus a desired color image may contain an image, such as a pie chart in a business plan, and a black-and-white image may be a photograph, which needs to be printed in a higher resolution.

Therefore, it would have been obvious to alter Katakura, based on knowledge held in the prior art, in such a way that black-and-white image data has a higher resolution than color image data, as set forth in claims 1, 2, 6, and 7.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571)272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached at (571) 272-7437. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
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/Mark R. Milia/

Examiner, Art Unit 2625

/David K Moore/

Supervisory Patent Examiner, Art Unit 2625